CIRM grantee Alvarez-Buylla wins 2011 Prince of Asturias Award for neural stem cell research

Posted: May 31, 2011

Created: 31/05/2011 - 11:04

Arturo Alvarex-Buylla, PhD

CIRM grantee and UCSF professor Arturo Alvarez-Buylla, PhD, won the prestigious 2011 Prince of Asturias Award for Technical and Scientific Research for his work with neural stem cells. He is credited with first discovering the regenerative cells in the brains of mammals, work that laid the groundwork for a number of CIRM grants and clinical trials based on neural stem cells.

In their announcement about the award UCSF quotes Arnold Kriegstein, MD, PhD, director of the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UCSF.

“ "Arturo's contribution to the field of adult stem cell science has been tremendous. He has helped lay the foundation for our understanding of the role and behavior of neural stem cells in the adult brain, which could lead to new strategies for treating brain damage and diseases."

In the announcement, Jennifer O'Brien describes the work that earned Alvarez-Buylla his recognition:

“ Alvarez-Buylla, specifically, was recognized for identifying neural stem cells in the brains of mammals, and for his ongoing research on their behavior â and potential therapeutic use â in treating diseases. He is exploring their possible role in the development of the most common type of brain tumor, the glioma, and their potential use in regenerating brain tissue damaged by injury or degenerative diseases. More generally, he is studying the way in which adult neural stem cells behave and function â their development into young neurons, the migration of these neurons from their site of birth to their final destinations, and their function in the adult brain.

Alvarez-Buylla has a CIRM Early Translational II Award to develop a cell-based therapy to inhibit the hyperactive neural circuits in people with epilepsy. In his public summary for the award he writes:

“ In 20-30% of these patients, seizures are unresponsive to drugs, requiring invasive surgical resection of brain regions with aberrant activity. The candidate cells we propose to develop can inhibit hyperactive neural circuits after implantation into the damaged brain. As such, these cells could provide an effective treatment not just for epilepsy, but also for a variety of other neurological conditions like Parkinson's, traumatic brain injury, and spasticity after spinal cord injury.

It's great to see CIRM grantees honored for the incredible advances they've in medicine and human health.

A.A.

Tags: Early Translational, Alvarez-Buylla, University of California San Francisco